

4. (Twice Amended) The heparin-binding protein of claim 1, wherein the at least one sugar chain is covalently bonded through a peptide to which the at least one sugar chain is added.

5. (Thrice Amended) The heparin-binding protein of claim 4, wherein the heparin-binding protein comprising the at least one covalently bonded sugar chain comprises:

(a) a protein consisting of the amino acid sequence of SEQ ID NO: 1, 17, 19, 21, 23, or 29; or

FS (b) a protein which consists of the amino acid sequence of SEQ ID NO: 1, 17, 19, 21, 23, or 29 having a deletion, substitution, addition or modification of at least one amino acid, wherein the heparin-binding protein comprising at least one the sugar chain has FGF activity and wherein the peptide to which the sugar chain is added comprises a proteoglycan core protein or a part thereof.

6. (Twice Amended) The heparin-binding protein of claim 1, wherein the at least one sugar chain is bonded to the heparin-binding protein at a site forming a turn in the secondary structure, or at a site near one of the ends, or at a site at which addition of the sugar chain will not change the tertiary structure of said protein sufficiently to cause said protein to incur a loss of activity.

F 3 14. (Twice Amended) A pharmaceutical composition containing the heparin-binding protein of any one of claims 1 or 3-6 as an active ingredient.

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F 4
~~16. (Twice Amended) A heparin-binding protein comprising at least one covalently bonded sugar chain, wherein the at least one sugar chain is selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof, wherein the at least one sugar chain is covalently bonded through a peptide to which the sugar chain is added, thereby increasing the residual activity of the heparin-binding protein by adding the at least one covalently bonded sugar chain.~~

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F 5
18. (Amended) An improved heparin-binding protein which comprises a heparin-

binding protein functionalized by covalently bonding thereto at least one sugar chain, wherein the at least one sugar chain is covalently bonded through a peptide to which the sugar chain is added thereby increasing the residual activity of the heparin-binding protein, said at least one sugar chain selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof.

19. (Twice Amended) A heparin-binding protein comprising a plurality of covalently bonded sugar chains, wherein the sugar chains are selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof, wherein the sugar chains are covalently bonded through a peptide to which the sugar chains are added thereby increasing the residual activity of the heparin-binding protein.

20. (Amended) An improved heparin-binding protein comprising a heparin-binding protein containing a peptide sequence to which at least one sugar chain is covalently bonded, wherein the at least one sugar chain is covalently bonded through the peptide sequence to which the at least one sugar chain is added, thereby increasing the residual activity of the heparin-binding protein, said sugar chain selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan, an N-linked sugar chain combined with a sulfated polysaccharide or a glycosaminoglycan and combinations thereof.

Please add the following new claims:

23. An improved heparin-binding protein which comprises a heparin-binding protein modified with covalently bonded sugar chains, each sugar chain being selected from the group consisting of a sulfated polysaccharide, a glycosaminoglycan, an O-linked sugar chain combined